teams to care for those with HIV infection or on the part of patients to use their general practitioners but because of a reluctance of hospital based teams to transfer responsibility to their colleagues in the community.

The current arrangements for allocating funds to hospital based providers offer few incentives for HIV specialists to work with primary care teams. The failure to allocate resources to providers in the community must be urgently addressed by purchasers if general practitioners and district nurses are to be encouraged to participate in shared care for patients with HIV infection.

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1 McCarthy M, Layzell S. Funding policies for HIV and AIDS: time for change. BMJ 1993;307:367-9. (7 August.)

Patients benefit from shared care

EDITOR,—My experience of funding for care of patients with HIV and AIDS confirms the views expressed by Mark McCarthy and Sarah Layzell.¹ As a result of the way in which funding has been allocated, specialist services (both hospital and community based) have been encouraged to exclude general practitioners from involvement in the management of HIV and AIDS. I believe that the care of these patients will greatly benefit from integration into generic services.

I am a "GP fellow in HIV" recently appointed by North West Thames region to Barnet Family Health Services Authority. This is a part time position which I combine with a partnership in a fundholding general practice in north London. It is a newly created post designed to increase the amount and quality of care offered to HIV and AIDS patients by the primary health care team.

North West Thames region has created two such posts in the past six months in order to develop a seamless service between primary and secondary care and to help general practitioners in managing this relatively new disease. These aims are being achieved through liaison with hospital services, continuing education for the whole primary health care team, and increasing awareness around the subject of HIV and AIDS. Great emphasis is put on prevention and on promotion of sexual health.

My work also confirms the difficulty of obtaining accurate information. The seemingly simple task of ascertaining the numbers of patients from Barnet being treated in different centres revealed inadequate information systems and gross inconsistencies.

The high cost of treatment is often cited by general practitioners as an obstacle to becoming more involved in the management of HIV and AIDS patients. They fear that this is another example of patients being transferred to primary care when the costs become too high. It would be a shame if the right thing was prevented from happening because of the fear that it was being done for the wrong reasons. Expensive drugs should be funded from a central budget regardless of whether the patient is managed in primary or secondary care.

General practitioners are in an ideal position to share in the management of the disease. They are also able to care for and support dying patients and their families and partners. General practice has an essential role to play in preventing HIV and AIDS from becoming a special disease managed in

isolation and marginalised to the extent of exclusion from generic services.

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1 McCarthy M, Layzell S. Funding policies for HIV and AIDS: time for change. BMJ 1993;307:367-9. (7 August.)

Patients have access to palliative care

EDITOR,—We are worried about the accuracy of Mark McCarthy and Sarah Layzell's informtion on the provision of palliative care for people with HIV and AIDS.¹ One of the implications of their paper is that local hospice units in the region do not accept or admit AIDS patients. They do not seem to be aware of the services available to the Camden and Islington Health Authority, of which McCarthy is director of public health, let alone those in the North East Thames region.

Available to the authority that McCarthy advises are palliative care services which are fully integrated with the hospital and primary care services. Edenhall Marie Curie Centre (the local inpatient hospice unit) and two local support teams (Islington and Hampstead) accept patients with AIDS or HIV infection. All the neighbouring services (seven other support teams and four other hospice inpatient units) have the same policy.

If future resource allocations for HIV and AIDS are to be made by purchasers rather than by direct funding of providers it is disturbing to think that purchasers' decisions about allocation of these resources may be made on the basis of misleading information. Specialist hospital services, in close liaison with local services, are best equipped with the skills and experience that these patients need early in their illness. In the terminal phase people with HIV/AIDS do not differ substantially from others with incurable conditions. At this stage the focus of care should shift back to the local community, where primary care teams and local hospitals are supported by specialist palliative care teams and units.

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1 McCarthy M, Layzell S. Funding policies for HIV and AIDS: time for change. BMJ 1993;307:367-9. (7 August.)

Urinary microalbumin excretion and preterm birth

EDITOR,—Ivan J Perry and colleagues report an association between urinary microalbumin excretion at the first antenatal visit and gestational age at delivery.1 We have also examined the potential use of urinary screening tests for pre-eclampsia and have obtained urine samples from a considerably larger number of women in early pregnancy. We obtained midstream specimens of urine from 500 normotensive, nulliparous women at 19 weeks' gestation and measured urinary albumin concentration by immunoturbidimetry of centrifuged urine samples, using a centrifugal analyser (Monarch). Urinary creatinine concentration was determined with the Jaffe reaction of creatinine with alkaline picrate reagent, measured with a kinetic method. In view of the suggestion that measurement of the ratio of urinary calcium to creatinine concentrations is a better screening test for pre-eclampsia than measurement of microalbuminuria,2 we measured the urinary calcium concentration, using a red arsenazo dye which binds calcium to produce a complex that can be measured with a perspective analyser.

We did not find any association between the urinary albumin:creatinine ratio and gestational Distribution of preterm births (delivery before 37 complete weeks' gestation) by quartile of distribution of urinary albumin: creatinine ratio

| Quartile | No of women | Median gestation (interquartile range) (weeks) | No (%) of preterm births | |
|--------------------------|----------------|--|--------------------------|--|
| First (0·03-0·21) | 126 | 40 (38-41) | 13 (10·3) | |
| Second ($> 0.21-0.57$) | 124 | 40 (39-40) | 19 (15.3) | |
| Third ($>0.57-0.84$) | 123 | 40 (38-40) | 18 (14-6) | |
| Fourth ($> 0.84-4.85$) | 127 | 40 (38-41) | 15 (11.8) | |

age at delivery (p>0.1), Spearman correlation coefficient 0.017; table). Likewise, we did not find any associations between gestational age at delivery and urinary albumin, creatine, or calcium concentrations (in each case p>0.2). After logarithmic transformations, as performed by Perry and colleagues, we did not find any significant correlations (p<0.1).

We suggest that urinary microalbumin excretion is unlikely to be related to preterm birth.

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- 1 Perry IJ, Gosling P, Sanghera K, Churchill D, Luesley DM, Beevers DG. Urinary microalbumin excretion in early pregnancy and gestational age at delivery. BMJ 1993;307:420-1. (14 August.)
- 2 Rodriguez MH, Masaki DI, Mestman J, Kumar D, Rude R. Calcium-creatinine ratio and microalbuminuria in the prediction of pre-eclampsia. Am J Obstet Gynecol 1988;159:1452-5.

Muscle cramps during prednisolone treatment

EDITOR,—J Lear and R G Daniels have reported muscle cramps related to corticosteroid treament.¹ In the past 40 months I have seen 55 patients with the nephrotic syndrome due to minimal change glomerulopathy. Forty five (36 of whom were female) were adults aged over 15. I have treated these patients with prednisolone 1 mg/kg and symptomatic treatment (salt restriction and diuretics) as required. The patients took this dosage of prednisolone for four to eight weeks, depending on their response and the occurrence of side effects, before starting to taper the dose. During this period one of the nine men and 30 of the 36 women complained of muscle cramps, which were sometimes severe and incapacitating.

Initially I thought that this could be related to salt restriction and the use of diuretics with consequent electrolyte imbalances. The mean serum sodium concentration (over the first four to eight weeks), however, was 136 mmol/l (range 133-146 mmol/l) in the men and 133 mmol/l (130-144 mmol/l) in the women. The corresponding serum potassium concentrations were 4·4 mmol/l (3·6-5·0 mmol/l) and 4·5 mmol/l (3·5-4·8 mmol/l) respectively. All the patients had normal serum calcium (corrected for albumin) and magnesium concentrations.

A reduction in the dose of diuretic and liberalisation of salt intake had no apparent effect on the muscle cramps. I used quinine empirically (dose 300 mg twice daily) in 11 of the 36 women, with complete or partial relief of the muscle cramps; these recurred promptly, however, when I stopped the quinine for fear of side effects. The cramps resolved as the dose of prednisolone dropped to less than 10 mg daily.

Lear and Daniels's patients developed muscle cramps while taking either salbutamol or prednisolone. The common factor between these two drugs is their ability to induce hypokalaemia. I hypothe-

sise that the muscle cramps may be related to changes in the intracellular concentrations of electrolytes rather than the serum concentrations. Changes in intracellular electrolytes have been reported in some tissues after the addition of aldosterone.²³

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- 1 Lear J, Daniels RG. Muscle cramps related to corticosteroids. BMJ 1993;306:1169. (1 May.)
- 2 Osore H. Effects of D-aldosterone on sodium and potassium concentrations of incubated renal slices—a dual mechanism of action. East Afr Med 7 1981;58:912-21.
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Mental health professionals favour community supervision orders

EDITOR,—Proposals to reestablish a form of compulsory treatment for mentally ill people in the community have met with considerable resistance.¹ The Mental Health Act Commission voted against any new recommendations in 1991.² The Royal College of Psychiatrists recently proposed a community supervision order, whose urgent consideration was part of the secretary of state's review.³4

We surveyed the opinions about community supervision orders of all general psychiatrists plus a representative sample of community psychiatric nurses and approved social workers in South West Thames region. We asked about their familiarity with, willingness to use, and concerns about four potential options—namely, the proposal by the Royal College of Psychiatrists for a community supervision order; a similar proposal, but to be initiated by a mental health review tribunal; the reinstatement of a form of treatment during extended leave of absence from section 3 of the Mental Health Act 1983; and extension of the use of guardianship.

Fifty nine (68%) of the 87 psychiatrists, 55 (63%) of 87 community psychiatric nurses, and 101 (28%) of 360 approved social workers replied. A much higher proportion of psychiatrists was prepared to use some form of community supervision order without further reservation (42 (71%) versus 14 (25%) community psychiatric nurses and 32 (32%) approved social workers). A substantial minority of respondents (17 (31%) community psychiatric nurses and 19 (19%) approved social workers) was not prepared to use a community supervision order, but only one psychiatrist expressed this opinion. Despite the overall positive response towards the proposal for some form of community supervision order, reservations about it were shared by all three groups (table).

Our survey suggests that the attitudes of mental health professionals towards some form of community supervision order are considerably more positive than expected. The two options favoured by the secretary of state's review (enhanced guardianship and extended leave of absence) were the options least favoured by the three professional groups surveyed.

The repeated experience of deterioration and compulsory admission followed by discontinuation of treatment after discharge and further relapse represents a personal tragedy for patients and their carers. Whether their needs will be met by the present proposals and whether supervised discharge is more widely used than guardianship has been remains to be seen.

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- 1 Groves T. Government wants wider legal powers for community care. BMJ 1993;307:463. (21 August.)
- 2 Mental Health Act Commission. Compulsory treatment in the community: a discussion paper. London: MHAC, 1986.
- 3 Mental Health Act Commission. Compulsory treatment of the mentally disordered in the community: the field of choice. London: MHAC, 1988.
- 4 Royal College of Psychiatrists. Community treatment orders—a discussion document. London: RCP, 1987.

Risk of Creutzfeldt-Jakob disease in bodybuilders

EDITOR,—The investigation of two French doctors (one of whom was the president of the France-Hypophyse association) for manslaughter after a child who had been given human growth hormone died of Creutzfeldt-Jakob disease has brought this issue into focus once more. A link between human growth hormone and Creutzfeldt-Jakob disease has been recorded frequently in the past. Several million phials of untreated hormone were allowed to circulate in the summer of 1985, even though it had been decided after an alert by the US Food and Drug Administration in May of that year to treat extracts with urea to inactivate the agent that causes Creutzfeldt-Jakob disease.

Though cases of Creutzfeldt-Jakob disease have been documented in people who were given the hormone for legitimate therapeutic purposes, another group of recipients may be in danger. The use of self administered exogenous growth hormone by athletes and bodybuilders has been popular since the early 1980s. As drugs that enhance performance are often manufactured in underground laboratories and are also obtained from eastern European sources, these athletes and bodybuilders may have put themselves at risk of developing Creutzfeldt-Jakob disease by their misuse of human growth hormone.

This is pertinent since about half of the 120 000 pituitary glands obtained between 1983 and 1988 came from Bulgaria and Hungary.

Several studies have been conducted on the effects of human growth hormone on athletic performance, and one handbook on drugs that enhance performance stated in 1991 that "there is even a form of the original human extract Growth

Drawbacks of community supervision orders cited by psychiatrists, community psychiatric nurses, and approved social workers ranked by frequency

| | Psychiatrists | Community psychiatric nurses | Approved social workers | Overall |
|---|---------------|------------------------------------|-------------------------------|---------|
| Patients might avoid contact and become homeless | 2 | 1 | 1 | 1 |
| Substitute for proper resources and provision of treatment | 1 | 4 | 1 | 2 |
| Abuse of civil liberties | 5 | 3 | 1 | 3 |
| Would damage carer-client relationship | 4 | 2 | 6 | 4 |
| Would increase workload, for which resources are not available | 3 | 5 | 4 | 4 |
| Would damage relationships with voluntary bodies | 7 | 6 | 7 | 6 |
| Unnecessary if care programme and management approach used properly | 8 | 8 | 5 | 7 |
| Unacceptable to other team members | 6 | 7 | 9 | 8 |
| Unnecessary if current legislation used properly | 9 | 9 | 8 | 9 |

Hormone available in a few countries." If this statement is accurate then people may have become infected by the agent that causes Creutzfeldt-Jakob disease as a result of their misuse of growth hormone to enhance their performance.

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- 1 Dorozynski A. French to investigate deaths from growth hormone. BMJ 1993;307:281. (31 July.)
- Nau J-Y. Manslaughter investigation of French doctors. Lancet 1993;342:295-6.
- 3 Gibbs CJ Jr, Asher DM, Brown PW, Fradkin JE, Gajdusek DC. Creutzfeldt-Jakob disease infectivity of growth hormone derived from human pituitary glands. N Engl J Med 1993;328: 358-9.
- 4 Deyssig R, Frisch H, Blum WF, Waldhor T. Effect of growth hormone treatment on hormonal parameter, body composition and strength in athletes. Acta Endocrinol 1993;128:313-8.
- 5 Phillips WN. Anabolic reference guide. 6th ed. Golden, Colorado: Mile High Publishing, 1991:38-9.

Underenumeration in 1991 census

EDITOR,—Gyles R Glover notes that there seems to have been a disproportionate underenumeration in the 1991 census of young men in certain ethnic groups, particularly black Caribbeans. The Office of Population Censuses and Surveys has already reported its estimate of an overall underenumeration of some 2% in the 1991 census for the population as a whole. This was higher for men (3%) than for women (1%), and among people in their 20s the figures were 9% and 3% respectively.

We are currently assessing underenumeration by age and sex for broad geographical areas (such as Inner London, Outer London, and other metropolitan areas). Underenumeration of men in their 20s seems to have been considerably higher in Inner London and other metropolitan areas and cities than in the rest of Britain. These areas are those where most ethnic minorities live.

Even after allowance is made for the age-sex and geographical patterns in the underenumeration, the male:female ratios for those born in Britain (which excludes the effect that migration may have on the sex ratios) still seem to vary considerably between certain ethnic groups. We are now trying to use these variations in assessing the best way of getting reliable information to indicate the underenumeration by ethnic group. This is not easy. Our findings will be reported in the forthcoming census topic report on ethnic group and country of birth and in a census user guide on undercoverage in the 1991 census.

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1 Glover GR. Sex ratio errors in census data. *BMJ* 1993;307:506. (21 August.)

Forced hyperventilation increases blood pressure

EDITOR,—In his comments on the possible physical effects of forced hyperventilation used by Gestalt practitioners in relaxation therapy¹ Digby Tantam does not make it clear that hyperventilation can cause coronary artery spasm with typical ischaemic pain and electrocardiographic changes.²¹ Forced hyperventilation could therefore prove hazardous to patients with unstable angina or coronary artery disease. In addition, there are suggestions that hyperventilation increases blood pressure.⁴ In a study that we have just completed forced hyperventilation increased the blood pressure of healthy

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